

WHAT IS CLAIMED IS:

- 1 1. An automated storage system comprising:
2 a media storage facility including a plurality of individual medium
3 slots, each individual medium slot being for storing an individual medium, the
4 media storage facility further including a plurality of superset slots, each superset
5 slot being for storing a superset of media;
6 at least one mechanism for accessing individual media; and
7 at least one mechanism for accessing supersets of media,
8 wherein the media storage facility is configured such that any
9 individual media located in a superset remain accessible on an individual basis in
10 addition to being accessible as part of the superset where it is located.
- 1 2. The automated storage system of claim 1 wherein the media
2 storage facility is configured such that supersets can be reorganized, emptied, or
3 created based on a list of individual media present in the media storage facility.
- 1 3. The automated storage system of claim 1 wherein the media
2 storage facility is configured such that supersets can be reorganized, emptied, or
3 created based on a set of instructions or policies imposed by a controlling system.
- 1 4. The automated storage system of claim 3 wherein the media
2 storage facility is configured such that the organization of the supersets can be a
3 RAID grouping.
- 1 5. The automated storage system of claim 1 wherein the media
2 storage facility is configured such that intermediate supersets can be logically
3 organized within the physical organization of a parent superset.
- 1 6. The automated storage system of claim 5 wherein the media
2 storage facility is configured such that an intermediate superset can be an individual
3 media location within the organization of a parent superset.

1 7. The automated storage system of claim 1 wherein the media
2 storage facility is configured such that intermediate supersets can be physically
3 organized while maintaining a logical organization relationship to a parent superset.

1 8. The automated storage system of claim 1 wherein the media
2 storage facility is configured to receive supersets and individual media such that
3 system accessible supersets may be created with received individual media and such
4 that received supersets may be split into multiple system accessible individual media
5 or intermediate supersets of media.

1 9. The automated storage system of claim 8 wherein the media
2 storage facility is configured to manage more types of supersets than the system is
3 organized to receive.

1 10. The automated storage system of claim 8 wherein the media
2 storage facility is configured such that system accessible individual media may be
3 grouped to form supersets for ejection and such that system accessible supersets may
4 be ejected as a unit or split into multiple individual media for ejection.

1 11. The automated storage system of claim 1 wherein any
2 individual media located in a superset remain accessible as part of an intermediate
3 superset within the superset.

1 12. The automated storage system of claim 1 wherein the
2 accessing mechanisms are the same physical mechanism.

1 13. The automated storage system of claim 1 wherein there are a
2 plurality of different types of supersets of media.

1 14. An automated storage system comprising:
2 an automated storage library including a plurality of individual
3 medium slots, each individual medium slot being for storing an individual medium,

4 the automated storage library further including a plurality of superset slots, each
5 superset slot being for storing a superset of media;
6 at least one mechanism for accessing individual media; and
7 at least one mechanism for accessing supersets of media,
8 wherein the automated storage library is configured such that any
9 individual media located in a superset remain accessible on an individual basis in
10 addition to being accessible as part of the superset where it is located.

1 15. The automated storage system of claim 14 wherein the
2 automated storage library is configured such that supersets can be reorganized,
3 emptied, or created based on a list of individual media present in the automated
4 storage library.

1 16. The automated storage system of claim 14 wherein the
2 automated storage library is configured such that supersets can be reorganized,
3 emptied, or created based on a set of instructions or policies imposed by a
4 controlling system.

1 17. An automated storage system comprising:
2 a shelf system including a plurality of individual medium slots, each
3 individual medium slot being for storing an individual medium, the shelf system
4 further including a plurality of superset slots, each superset slot being for storing a
5 superset of media;
6 at least one mechanism for accessing individual media; and
7 at least one mechanism for accessing supersets of media,
8 wherein the shelf system is configured such that any individual media
9 located in a superset remain accessible on an individual basis in addition to being
10 accessible as part of the superset where it is located.

1 18. The automated storage system of claim 17 wherein the shelf
2 system is configured such that supersets can be reorganized, emptied, or created
3 based on a list of individual media present in the shelf system.

1 19. The automated storage system of claim 17 wherein the shelf
2 system is configured such that supersets can be reorganized, emptied, or created
3 based on a set of instructions or policies imposed by a controlling system.

1 20. The automated storage system of claim 17 wherein the
2 accessing mechanisms are the same physical mechanism.